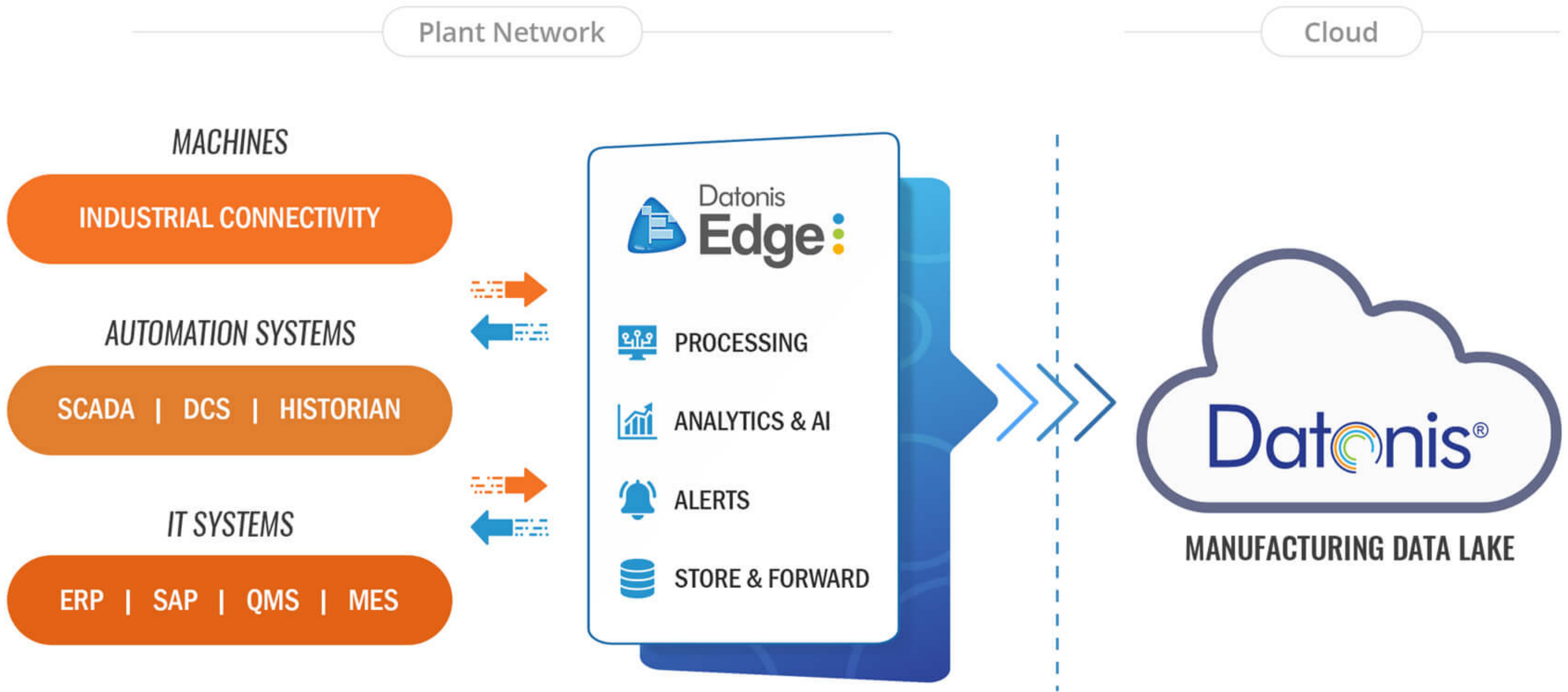


Datonis Edge is a distributed computing platform that processes, analyzes and responds to Industrial IoT data close to the edge of the network and seamlessly transfers the data to the Datonis platform for further insights.



“Leverage the power of **edge computing** and the cloud to build a powerful and flexible **IoT solution for smart manufacturing**”

## Modules



### INDUSTRIAL CONNECTIVITY

Rapidly connect your machines and your shop-floor IT systems to Datonis by using a pre-built library of industrial and software adapters



### EDGE ANALYTICS AND AI

Define analytics and machine learning models on the platform and push them to the Edge for greater performance and faster response times



### SCALABILITY AND RESILIENCE

Leverage the distributed capabilities of Edge to set up a distributed, resilient and fault-tolerant Edge infrastructure that never loses data



### CUSTOM PLUGINS

Add bespoke data processing, device connectivity and systems integration capabilities using the Edge Plugin API



### DEVICE MANAGEMENT

Manage, secure, control and upgrade your Edge devices from the platform using a powerful policy engine



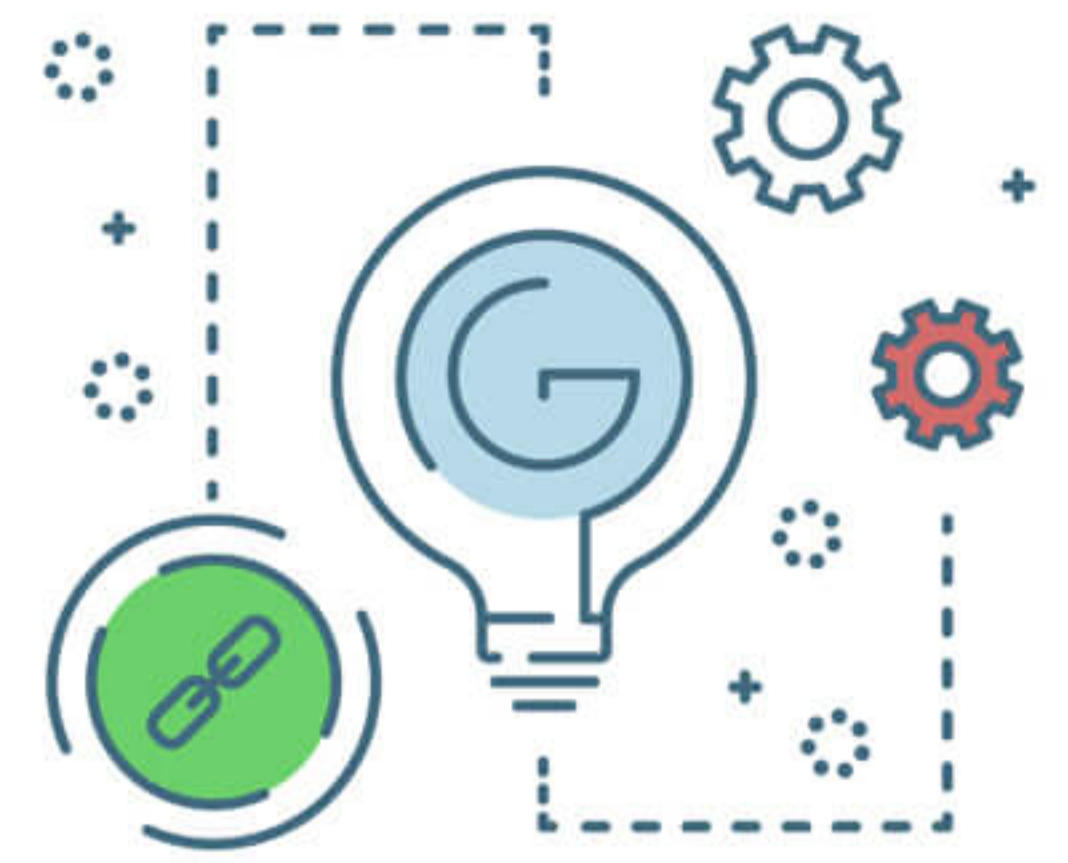
### SECURITY

Define key-based authentication for every Edge device that is connected and set up policies to ensure no violation



## What is Datonis Edge and what can it do?

- The Edge is a distributed computing platform meant for analyzing data from devices and systems at the edge of the network or closer to the source of the data.
- Analyzing data at the edge rather than the cloud allows the Datonis platform to respond quickly to events. Less time is spent in waiting for the data to arrive at the cloud.
- Edge reduces the data transmitted to the cloud, allowing decisions to be made locally. Information necessary for long-term analysis is then transmitted to the cloud. This makes the platform highly data efficient.



## How does Edge work in a production environment?

- Edge is usually installed inside the industrial network on a server with the necessary hardware configuration. It requires network access to the devices and software systems that it needs to connect to.
- Adapters are configured based on the systems that Edge connects to. It provides a rich expression syntax to analyze data and take actions based on the discovered patterns.
- Data suitable for long-term analysis is sent to the Datonis IoT platform on the cloud using HTTP or MQTT over SSL. Edge can be configured to transmit data through proxies and firewalls.
- Data is transmitted over a connection that is TLS 1.2 with 256-bit encryption, thus proving high levels of security.
- Edge has the capability to deal with highly unreliable data networks. It comes with a built-in database that can store and re-transmit data if there is a network outage.
- Edge's advanced failover and load balancing capabilities ensure uptime even on an extreme scale. This ensures optimum performance, without any data loss in challenging environments.



## What kind of Devices and Systems can Edge support?

- Edge comes with versions that can run on small micro controllers all the way up to full-blown versions that require an OS to run on. Capabilities vary based on the platform chosen.
- Edge has a set of pre-built adapters for common industrial protocols. This includes OPC, Modbus, PROFINET, EtherNet/IP, MTConnect, CSV and XML.
- The platform has support for a Script adapter, allowing you to quickly write an adapter for an unsupported protocol with a few lines of javascript.
- Edge is fully extendible, allowing you to extend its capabilities by writing plugins.



## What are some of the advanced capabilities of Edge?

- The Edge platform provides a REST API that helps you write local applications that can leverage the data collected by it. An example of this would be a local dashboard.
- Edge has full-blown support for Machine Learning. The plugin library provides the ability to leverage standard ML algorithms and apply that to the information collected.
- Support can be extended for custom or licensed Third Party Machine Learning algorithms by writing custom plugins.

